

## Voice Messages Received as Email

Subscribers may also send voice mail to non-subscribers as email. Unlike sending voice mail by using a web page, this option includes the entire digitized voice message stored in an email. This application is useful if the recipient does not have access to the Web although by default the voice message will be delivered as a web page.

## Voice Messaging (Non-Subscribers to Subscribers)

The presently preferred embodiment of the present invention also enables non-subscribers to send a message having a voice mail format to subscribers. A non-subscriber calls a server having an intended recipient subscriber's mailbox. The server answers and prompts the non-subscriber to enter the intended recipient's mailbox ID and to record a message. The server saves the voice message in digital form in the intended recipient subscriber's mailbox for later retrieval. Roaming and Virtual Mailbox

The subscriber mailbox can also be configured as a roaming or virtual mailbox, as previously described above. Voice Messaging (Between Subscribers)

Voice mail messages can also be sent between subscribers. In the presently preferred embodiment of the present invention, the u-mail address scheme provides a convenient way for server subscribers to send voice messages to each other. Each voice mail message received by a server either from the Internet or from one of the network interfaces is stored in the intended recipient's mailbox for later retrieval. The subscribers can belong to the same server or to different server's on the Internet.

Sending a voice mail message occurs in the following way. A sending subscriber logs in to a local server in which the sending subscriber is a member, records a message, and enters the intended recipient subscriber's u-mail address using the telephone keypad, as disclosed above. The server stores the voice message in digital form and processes the request by determining whether the u-mail address corresponds to the local server or to a remote server by using a routing program and routing table.

If the u-mail address corresponds to the server, the message is stored in the intended recipient's mailbox for later retrieval. Otherwise, the server transmits the digitized voice message in packet form to the destination server over the Internet using the intended recipient's u-mail address. Upon completion of the transmission, the destination server restores the voice message into its digitized form and deposits the message into the intended recipient's mailbox based on the user name included in the u-mail address.

Similarly the sending subscriber can compose the voice message as an email and send it to the receiving subscriber's u-mail address. The server will check and deliver the voice message as described above. The originating subscriber does not need to know whether the recipient is a local or remote subscriber. The u-mail address offers the same identity as an email address, with the servers at both ends of the communication handling the actual delivery.

While illustrative embodiments and applications of this invention have been shown and described, it would be apparent to those skilled in the art that many more modifications than have been mentioned above are possible without departing from the inventive concepts set forth herein. The invention, therefore, is not to be limited except in the spirit of the appended claims.

What is claimed is:

1. A system for receiving and sending messages, the system including at least a first messaging apparatus and a second messaging apparatus, each messaging apparatus comprising:

a converter for converting an incoming message having a first format to a processed message having a delivery format, said converter converting said incoming message to said delivery format according to a format specified by delivery information provided by a user;

a first network interface linked to said converter and a first network, said first network interface including a means for transporting a message between said converter and at least one messaging interface linked to said first network;

a second network interface linked to said converter and a second network, said second network interface for transporting a message between said converter and at least one messaging interface linked to said second network;

means for delivering said processed message through said first network or through said second network in response to said delivery information;

wherein said first messaging apparatus is coupled to said second messaging apparatus through said first network;

wherein said first network interface communicates with a telephone network, said first network interface having a messaging layer for interpreting a destination address generated by a DTMF signal generator, said destination address generated including a "." symbol, an "@" symbol, and a ".com" symbol;

wherein said destination address follows an Internet Domain Name System addressing scheme; and said DTMF signal generator includes a telephone keypad;

said "." symbol generated by two successive DTMF signals with each signal corresponding to the "1" button on said telephone keypad;

said "@" symbol generated by two successive DTMF signals with each signal corresponding to the "1" button and the "2" button, respectively; and

said ".com" symbol generated by two successive DTMF signals with each signal corresponding to the "1" button and the "3" button, respectively.

2. A method of interpreting an Internet address generated by a DTMF signal generator having an alphanumeric keypad, comprising the steps of:

associating two successive selections of a "1" button on the keypad with a "." symbol;

associating the successive selections of a "1" button and a "2" button on the keypad, respectively, with an "@" symbol; and

associating the successive selections of a "1" button and a "3" button on the keypad, respectively, with a ".com" symbol.

3. A method as recited in claim 2, wherein said DTMF signal generator is a telephone.

4. A method as recited in claim 3, further including a step of generating numeric symbols comprising zero to nine by following a button selection for generating one of said numeric symbols with a "0" button selection.

5. An apparatus for storing and forwarding messages, the apparatus comprising:

a first network interface for interfacing with a first network;

a second network interface for interfacing with a second network;

means for receiving an incoming message and delivery information from said first network interface, said incoming message having a message content format of a first type;